

SCENARIO BASED SQL QUESTIONS

➤ CALCULATE YEAR OVER YEAR GROWTH IN REVENUE ?

CREATE TABLE SALES

**(
ITEM_TYPES VARCHAR (100),
ORDER_DATE DATE,
TOTAL_REVENUE INT);**

INSERT INTO SALES VALUES

**('Cereal','2022-08-22',5000),
('Office Supplies','2024-02-05',6000),
('Fruits','2021-06-20',7000),
('Office Supplies','2023-01-02',3000),
('Baby Food','2024-04-02',7000),
('Household','2021-04-28',2000),
('Vegetables','2022-07-17',1000),
('Personal Care','2023-07-14',4000),
('Cereal','2023-04-18',1000),
('Vegetables','2022-06-26',4000);**

SELECT * FROM SALES;

**SELECT EXTRACT (YEAR FROM ORDER_DATE) AS YEARS,
SUM(TOTAL_REVENUE) AS CURRENT_YEAR_REVENUE FROM SALES
GROUP BY YEARS ORDER BY YEARS;**

**/*----LAG (expression, offset, default) OVER (PARTITION BY column name(s)
ORDER BY column name(s))----*/**

WITH CTE AS

**(SELECT EXTRACT (YEAR FROM ORDER_DATE) AS YEARS,
SUM(TOTAL_REVENUE) AS CURRENT_YEAR_REVENUE FROM SALES
GROUP BY YEARS ORDER BY YEARS)**

**SELECT *, LAG(CURRENT_YEAR_REVENUE,1,0) OVER (ORDER BY YEARS)
AS PREVIOUS_YEAR_REVENUE
FROM CTE;**

WITH CTE AS

**(
SELECT EXTRACT (YEAR FROM ORDER_DATE) AS YEARS,
SUM(TOTAL_REVENUE) AS CURRENT_YEAR_REVENUE FROM SALES
GROUP BY YEARS ORDER BY YEARS
)**,

CTE1 AS

**(
SELECT *, LAG(CURRENT_YEAR_REVENUE,1) OVER (ORDER BY YEARS) AS
PREVIOUS_YEAR_REVENUE FROM CTE
)**

**SELECT *,
ROUND (((CURRENT_YEAR_REVENUE -
PREVIOUS_YEAR_REVENUE)/PREVIOUS_YEAR_REVENUE) *100,2) AS
YOY_GROWTH_PERCENTAGE
FROM CTE1 ORDER BY YEARS;**

